

We claim:

- 1 1. An actuator, in particular for a fuel injection valve, comprising:
2 - a top plate having at least one duct opening in particular for a respective
3 electric contact pin, onto which a contact stud carrier with a contact stud can be
4 located, wherein the duct opening is protected on its open side against the
5 ingress of plastic during extrusion coating,
6 - a sealing washer attached to the open side of the duct opening, wherein the
7 sealing washer is embodied to cover the top side of the top plate in an
8 overlapping manner at least in the area of the duct opening, thereby hermetically
9 sealing the duct opening.
- 1 2. The actuator according to claim 1, wherein the sealing washer is embodied in the
2 area of the duct opening with a thickening protruding at least partially into the
3 duct opening.
- 1 3. The actuator according to claim 1, wherein the sealing washer can be fixed into
2 position on the top side of the top plate and can preferably be secured there by
3 means of an adhesive.
- 1 4. The actuator according to claim 1, wherein a sprung element is provided which
2 presses the sealing washer against the open side of the duct opening.
- 1 5. The actuator according to claim 1, wherein an actuator length can be specified
2 between the contact stud of the contact stud carrier and a reference edge of the
3 actuator independently of the thickness of the sealing washer.
- 1 6. The actuator according to claim 1, wherein the sealing washer comprises an
2 insulating plastic material.

- 1 7. The actuator according to claim 1, wherein the sealing washer is embodied at
2 least partially from metal.
- 1 8. The actuator according to claim 1, wherein the actuator has a piezoelectric
2 element.

- 1 9. Fuel injector for use in an internal combustion engine comprising an actuator
2 comprising:
3 - a top plate having at least one duct opening in particular for a respective
4 electric contact pin, onto which a contact stud carrier with a contact stud can be
5 located, wherein the duct opening is protected on its open side against the
6 ingress of plastic during extrusion coating,
7 - a sealing washer attached to the open side of the duct opening, wherein the
8 sealing washer is embodied to cover the top side of the top plate in an
9 overlapping manner at least in the area of the duct opening, thereby hermetically
10 sealing the duct opening.
- 1 10. The fuel injector according to claim 9, wherein the sealing washer is embodied
2 in the area of the duct opening with a thickening protruding at least partially into
3 the duct opening.
- 1 11. The fuel injector according to claim 9, wherein the sealing washer can be fixed
2 into position on the top side of the top plate and can preferably be secured there
3 by means of an adhesive.
- 1 12. The fuel injector according to claim 9, wherein a sprung element is provided
2 which presses the sealing washer against the open side of the duct opening.
- 1 13. The fuel injector according to claim 9, wherein an actuator length can be
2 specified between the contact stud of the contact stud carrier and a reference
3 edge of the actuator independently of the thickness of the sealing washer.
- 1 14. The fuel injector according to claim 9, wherein the sealing washer comprises an
2 insulating plastic material.
- 1 15. The fuel injector according to claim 9, wherein the sealing washer is embodied
2 at least partially from metal..

- 1 16. A method of manufacturing an actuator for a fuel injector in an internal
2 combustion engine comprising the steps of:
3 - providing the actuator having a top plate and at least one duct opening for a
4 respective electric contact pin,
5 - attaching a sealing washer to the open side of the duct opening, wherein the
6 sealing washer is embodied to cover the top side of the top plate in an
7 overlapping manner at least in the area of the duct opening, thereby hermetically
8 sealing the duct opening,
9 - placing a contact stud carrier with a contact stud onto a top plate of the
10 actuator, thereby protecting the duct opening on its open side against the ingress
11 of plastic during extrusion coating.
- 1 17. The method according to claim 16, further comprising the step of fixing the
2 sealing washer into position on the top side of the top plate and preferably
3 securing the sealing washer there by means of an adhesive.
- 1 18. The method according to claim 16, further comprising the step of providing a
2 sprung element which presses the sealing washer against the open side of the
3 duct opening.
- 1 19. The method according to claim 16, further comprising the step of specifying an
2 actuator length between the contact stud of the contact stud carrier and a
3 reference edge of the actuator independently of the thickness of the sealing
4 washer.
- 1 20. The method according to claim 16, further comprising the step of extrusion
2 coating the actuator.